

Adding to this list the Royal Antelope (*Nanotragus pygmæus*), said by Temminck to be possibly the original of XLIII. 2, and the specimens asserted by Sundevall to be perhaps those of XLIII. 1 & 2¹, we are able to account, with the Lidth de Jende specimens now in the British Museum, for a very large proportion of Albert Seba's historical collection of Mammalia.

3. Descriptions of new Species of Lepidoptera Heterocera from Brazil, Mexico, and Peru.—Part II.² By W. SCHAUS, F.Z.S.

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The following descriptions are all taken from specimens in my own collection, and, with the exception of those from Peru, they were collected by myself.

Fam. LASIOCAMPIDÆ.

ORMISCODES OPIS.

Primaries above reddish brown; a basal straight, and an outer oblique, transverse grey band; a marginal wavy whitish shade; a long white streak at the end of the cell. Secondaries reddish brown; a median transverse greyish band and a submarginal dark brown shade. Underneath brown, the outer portion of the wings crossed by four bands of whitish scales. Head and thorax reddish brown. Abdomen black dorsally, whitish between the segments; anal segment red; underneath reddish brown.

Expanse 100 mm. ♀.

Hab. Petropolis, Brazil.

LONOMIA CARNICA.

Male. Above red, the wings crossed from the apex of the primaries to the middle of the inner margin on the secondaries by a broad black line, divided by a greyish shade; on the primaries two discal spots, the anterior one blackish, the posterior one white. Underneath pale brownish red, with broad, marginal, paler shades; the transverse line very narrow and indistinct, inwardly shaded with white; on the primaries two white discal spots; on the secondaries a black discal spot circled with white; a large black spot at the apex.

Expanse 80 mm.

Hab. Petropolis, Brazil.

PREPTOS, nov. gen

Antennæ minutely pectinated, and with long tufts of hairs at

¹ Pecora, p. 303 (1847). I have to thank Prof. W. Leche, of Stockholm, for information about the present condition of these specimens. See also Brooke, P. Z. S. 1872, p. 637.

² For Part I. see above, p. 272.

their base. Palpi very short, woolly, descending. Abdomen stout, not extending beyond the secondaries. Primaries broad, straight along the costal margin to near the apex, then convex; outer margin straight, the inner angle very convex. Secondaries with the costal margin very slightly convex; the outer margin convex. The discal cells very short, not extending beyond a third from the base.

PREPTOS OROPUS.

Fawn-colour, the outer margins broadly brown and separated from the ground-colour by a straight dark line, extending from the apices to the inner margins near the angles on both the primaries and secondaries; a median and on the primaries also an outer transverse dark wavy shade; a blackish spot on the subcostal vein of the primaries near the base. Underneath yellowish fawn-colour; a median and a submarginal dark brown, lunular, transverse band, and between these three similar but less distinct bands. Head and thorax pale fawn-colour. Collar dark brown. Abdomen dark fawn-colour.

Expanse 95 mm. ♀.

Hab. Jalapa, Mexico.

LEBEDA DOERI.

Male. Dark brown, reddish grey about the inner angle of the primaries, with three small black spots; the primaries also crossed by four pale lines, the inner two straight, the outer two slightly oblique; a small white point in the cell. Underneath brown flecked with greyish scales; two transverse pale lines from the costal margin of the primaries near the apex to the inner margin of the secondaries.

Expanse 75 mm.

Hab. Petropolis, Brazil.

ARTACE ANULA.

Female. Primaries above whitish with transverse greyish streaks, and a circular grey spot on the inner margin. Secondaries above greyish white, with a broad submarginal dusky band. Underneath grey, with a white marginal line. Body greyish.

Expanse 43 mm.

Hab. Rio Janeiro, Brazil.

ARTACE MERIDIONALIS.

Female. Primaries above white, with a basal, a median, and an outer row of dark grey spots on the veins, and two grey spots at the end of the cell; a marginal and a submarginal dusky grey transverse band, and a row of black spots on the extreme margin between the veins. Secondaries above grey, darker along the inner margin. Underneath: primaries grey, with the apex white and a row of dark spots on the extreme margin; secondaries grey, with the fringe white. Head and thorax grey. Abdomen dorsally dark grey, underneath white.

Expanse 44 mm.

Hab. Tijuca, Rio Janeiro.

Most nearly allied to *A. albicans*, Walker.

HYDRIAS THERESA.

Primaries above grey, the veins black towards the outer margin and some black scales at the base; two black points in the cell, and beyond the cell two transverse blackish lines, the inner one resembling a line of fish-scales, the outer one forming prolonged angles. Secondaries brown, the costal margin broadly grey, mottled with black; a marginal wavy, dusky grey line and a faint trace of a median transverse line. Head and thorax grey. Abdomen brown, grey subdorsally.

Expanse 35 mm.

Hab. Rio Janeiro, Brazil.

HYDRIAS BOCHICA.

Primaries light grey, the base brown with two contiguous wavy, brown, transverse lines; a black discal spot; beyond the cell another double transverse streak, and a submarginal row of brown spots; a brown spot on the costa near the apex; the outer margin brownish except at the apex and the inner angle. Secondaries with the costal and outer margins greyish; the inner margin and disk brown; two transverse wavy brown lines. Body brownish grey.

Expanse 38 mm.

Hab. Peru.

HYDRIAS BRAGANZA.

Male. Primaries above white; brown along the inner margin and posterior half of the outer margin, also a brown spot on the costal margin close to the apex, and a smaller spot near the base. Secondaries above brown, the costal margin broadly white. Underneath brown; a marginal wavy white line at the apex of the primaries, and a short broad white band at the apex of the secondaries. Head brownish. Thorax brown in the centre, on either side white. Abdomen brown.

Expanse 34 mm.

Hab. Rio Janeiro, Brazil.

HYDRIAS LACRIMOSA.

Male. Primaries above brown; a greyish basal transverse streak, also a similar outer wavy transverse streak, beyond which on the anterior half of the wing is a submarginal whitish band; a marginal broken white line from the apex to the inner angle. Secondaries light brown, darker along the costal margin and mottled with buff; a median and a marginal indistinct transverse line. Underneath light brown; beyond the cell the wings are crossed by three darker transverse lines. Body brown.

Expanse 26 mm.

Hab. Petropolis, Brazil.

HYDRIAS SORDIDA.

Male. Primaries above brown, slightly mottled with greyish scales; a transverse outer lunular line and a submarginal deeply angular black line. Secondaries rich brown; the costal margin mottled with greyish, and an indistinct wavy marginal line. Body brown; a few greyish hairs on the thorax.

Expanse 30 mm.

Hab. Petropolis, Brazil.

TALIMA CARMEN.

Male. Primaries above grey, brownish along the inner margin, whitish at the apex; beyond the middle of the wing a semicircular row of small black spots; an upright white streak on the inner margin near the angle. Secondaries above bright red; apex and fringe greyish brown. Wings underneath red; the costal margins and apices grey. Head and thorax grey. Abdomen red dorsally, grey underneath.

Expanse 23 mm.

Hab. Petropolis, Brazil.

Fam. LIMACODIDÆ.**ECHEDORUS ARGENTINA.**

Male. Wings grey, slightly hyaline and iridescent, the outer third slightly paler in colour. The primaries crossed at a third from the base by two outwardly curved, narrow, whitish lines; beyond the cell two wavy whitish lines and a wavy marginal whitish band; a small black spot at the end of the cell. Underneath, the primaries are almost denuded of scales, and show the markings of the upper surface. The secondaries above have the dark and light portions separated by a faint whitish shade, the darker portion occupying the entire inner margin; underneath, a broad median, transverse, black band, shaded with white on either side. Thorax and abdomen dark grey, with tufts of brownish hairs at the base of the wings; also similar tufts on the last segments underneath.

Expanse 43 mm.

The female is altogether more woolly, the primaries are hardly iridescent, the markings a little less distinct, and the black spot at the end of the cell more conspicuous. The secondaries are uniform dull grey.

Expanse 60 mm.

Hab. Petropolis, Brazil; Buenos Ayres.

TITYA FUMIDA.

Male. Wings smoky brown; a black spot at the end of the cell on the primaries, and a submarginal greyish band, more distinct on the primaries than on the secondaries. Body brown.

Expanse 38 mm.

Hab. Petropolis, Brazil.

TITYA ARGENTATA.

Female. Primaries above silvery white, the margins and fringe finely brown; a broad brown band from the middle of the inner margin to the costal margin near the apex. Secondaries brown. Underneath, all the wings brown. Body brown, reddish brown towards the anal segment.

Expanse 52 mm.

Hab. Rio Janeiro.

MEGALOPYGE RADIATA.

Brown, the basal half of the primaries below the median vein much darker and outwardly bordered with white, whence white lines extend towards the outer margin; at the end of the cell a large velvety brown spot; beyond the cell white lines radiate towards the apex and outer margin. Secondaries brown. Body brown. Head behind the antennæ white.

Expanse 54 mm. ♀.

Hab. Petropolis, Brazil.

MEGALOPYGE ACCA.

Primaries above pinkish brown; a blackish median transverse line. Secondaries roseate. Underneath roseate, the apices of the primaries brownish. Head and thorax brownish. Abdomen red.

Expanse 30 mm. ♂.

Hab. Rio Janeiro.

DALCERA TIJUCANA.

Primaries yellowish white, faintly reddish along the outer and inner margins and through the centre of the wing; fringe yellow; a black oblique line at the end of the cell, and a black shade along the median vein. Secondaries bright yellow. Head orange, collar yellow, thorax pinkish, and abdomen dorsally yellow; underneath orange. The wings underneath are yellow, with a small black mark at the end of the cell on the primaries.

Expanse 35 mm.

Hab. Tijuca, Rio Janeiro.

PINCONIA COA.

Orange, all the veins on the primaries outlined with yellow, more distinctly so in the male than in the female.

Expanse, ♂ 33 mm., ♀ 44 mm.

Hab. Coatepec, Jalapa, Mexico.

PARASA MINIMA.

Primaries light brown; a transverse median green band, widening on the inner margin to the base of the wing: a submarginal wavy, darker brown shade; the veins on the outer margin finely outlined with darker brown. Secondaries very light brown, somewhat darker

along the outer margin. Head and thorax light green. Abdomen brown.

Expanse 19 mm.

Hab. Coatepec, Mexico.

TRABALA CICUR.

Male. Primaries reddish yellow, the veins slightly darker; a darker basal streak along the median vein, and below this an irregular darker shade curving round it towards the apex; a marginal darker shade. Secondaries and abdomen reddish yellow. All the fringes very long.

Expanse 34 mm.

Hab. Corcovado, Rio Janeiro.

TRABALA DRUCEI.

Wings and body bright brownish yellow. On the primaries a brown, slightly curved streak from about the middle of the inner margin to the costal margin, very close to the apex; a dark marginal line.

Expanse, ♂ 30 mm., ♀ 36 mm.

Hab. Jalapa, Mexico.

This species was described and figured in the 'Biologia Centrali-Americana' as the female of *Vipsania anticlea*, Druce.

TRABALA CEBRENIS.

Primaries light green, a large brown space occupying the basal half of the wing above the median vein; the outer margin and part of the inner margin light brown, with a greyish marginal streak. Secondaries brown, slightly blackish along the outer margins. Head and thorax light green. Abdomen brown.

Expanse 28 mm. ♀.

Hab. Coatepec, Mexico.

TRABALA BRUMALIS.

Primaries above brown, darkest along the costal margin; the basal half of the median vein blackish; below this an indistinct whitish line curving upwards to the apex; beyond this a submarginal greyish shade, and then a marginal whitish shade from the apex to the middle of the inner margin; the extreme margin and fringe brownish. Secondaries light brown, thickly speckled with darker scales. Body brown; two light streaks on the head and thorax.

Expanse 42 mm. ♀.

Hab. Petropolis, Brazil.

VIPSANIA FRIGIDA.

Primaries light brown, faintly tinged with pinkish; a pale olive-green patch at the base of the costal margin, including a minute brown spot; from the base of the wings, following parallel with the inner margin for a short distance and then extending to the costal margin close to the apex, an olive-green irregular line, partly shaded

with yellowish green. Secondaries brown, slightly reddish along the inner margin. Head and thorax light greenish yellow. Abdomen dull reddish.

Expanse 29 mm.

Hab. Las Vigas, Mexico.

NYSSIA SULLA.

Primaries light reddish brown, faintly tinged with violaceous along the outer margin; a submarginal row of black points on the veins, connected by a faint black line. Secondaries yellowish white, brown at the anal angle and partly along the inner margin. Body brown; abdomen yellowish laterally and underneath.

Expanse 21 mm.

Hab. Petropolis.

NEOMIRESA COPAC.

Primaries dark cinereous brown; a basal, a median, and a submarginal transverse, wavy, darker shade; a small black point in the cell; a small olive-green spot above the submedian vein; the fringe brown with darker spots. Secondaries paler, except along the inner margin. Body dark cinereous brown.

Expanse 24 mm.

Hab. Peru.

AMYDONA SERICEA.

Primaries light brown, having a silky and wavy appearance, and shaded with darker brown, especially at the base, at the end of the cell, and submarginally. Secondaries brownish yellow. Thorax shaded with dark brown. Abdomen light brown, somewhat reddish brown dorsally.

Expanse 35 mm.

Hab. Peru.

SEMYRA STRAMINEA.

Female. Primaries reddish brown, the veins finely brownish; the inner margin and part of the outer margin purplish; two indistinct dark wavy lines from the base of the wing to the costal margin near the apex. Secondaries purplish brown, yellowish along the costal margin. Body purplish brown.

Expanse 27 mm.

Hab. Rinconada, Vera Cruz, Mexico.

EULIMACODES MÖSCHLERI.

Wings brown, the primaries with a quadrate darker space occupying the basal half of the wing below the median vein and including a small reddish and two minute white spots; a darker streak in the cell, and a subapical darker shade, beneath which are two or three small dark streaks. Body brown.

Expanse 23 mm.

Hab. Jalapa, Mexico.

Very similar in its markings to *Eulimacodes distincta*, Möschler, but a much smaller insect.

TARCHON MINOIS.

Primaries above dark reddish brown, the costal margin narrowly luteous; a black point in the cell; an outer transverse dark shade and a submarginal dark wavy line: underneath with the disk dark brown, the margins broadly light reddish brown. Secondaries above dark brown, the fringes golden brown: underneath light reddish brown; a black point in the cell, and two dark wavy transverse lines. Body dark brown above, underneath light reddish brown.

Expanse 28 mm.

Hab. Petropolis, Brazil.

Fam. BOMBYCIDÆ.

HYGROCHROA LIMOSA.

Primaries above silvery grey, light reddish brown along the inner margin, and finely so on the costa; an outer and a submarginal transverse wavy black line; a dark shade along the anterior half of the outer margin. Secondaries bronze-grey, darker along the outer margin; on the inner margin some dark brown and whitish spots. Body grey.

Expanse 26 mm. ♂.

Hab. Corcovado, Rio Janeiro.

TAMPHANA, nov. gen.

Antennæ deeply pectinated, as long as the thorax. Abdomen extending beyond the wings and laterally tufted. All the legs with tufts. Primaries long, not very broad, straight along the costa, slightly convex at the apex, outer margin slightly convex. Secondaries with the anal angle slightly prolonged, and the outer margin somewhat excavated close to the anal angle.

TAMPHANA MARMOREA.

Primaries above light brown, finely striated with dark brown; the costal margin paler; a broad basal transverse greyish band; a minute greyish spot in the cell; an outer transverse, double, wavy brown line; a large apical space on the costal margin whitish crossed by a greyish shade; a dark spot on the inner angle: underneath light brown, whitish at the apex. Secondaries above brown, with a dark spot about the middle of the inner margin: underneath light brown, with two dark transverse streaks.

Expanse 27 mm. ♂.

Hab. Palmeiras, Rio Janeiro.

AROTROS, nov. gen.

Female. Antennæ longer than the thorax, pectinated. Palpi short, tufted. Abdomen stout, the anal segment with long stiff

hairs. All the legs tufted. Primaries broad, the apex rounded, the outer margin very convex.

AROTROS STRIATA.

Wings buff, all the veins and lines between the veins brown. The primaries with the base and half of the costal margin dark grey. Head dark grey. Collar brown, with dark margins. Thorax and abdomen buff, the latter with numerous longitudinal dark streaks.

Expanse 45 mm.

Hab. Novo Friburgo, Brazil.

OLCECLOSTERIA MAYA.

Primaries above very light grey, an indistinct basal and outer transverse shade, beyond the latter a row of minute spots on the veins; a subapical, small, quadrate vitreous spot; the fringe on the middle of the outer margin dark brown; a minute black spot in the cell. Secondaries pale brownish grey. Underneath brownish grey, somewhat darker on the outer margin of the primaries below the apex; a submarginal brown line and a median brownish shade on all the wings; a fine transverse streak in the cell on the primaries. Body above grey; underneath light brownish grey.

Expanse 35 mm.

Hab. Jalapa, Mexico.

OLCECLOSTERIA MUTUSCA.

Male. Primaries above light grey, speckled with blackish scales, the apices darker; a basal and a median transverse dark wavy line; an outer row of minute black points on the veins, and a very small subapical round vitreous spot. Secondaries brownish, with two dark transverse lines. Underneath greyish brown, the apices of the primaries darker; the outer line on the secondaries forming numerous acute angles, also a small black point in the cell.

Expanse, ♂ 32 mm., ♀ 44 mm.

Hab. Rio Janeiro.

Very similar to *Olceclosteria microps*, Walker, but differs in its colour, the vitreous spot and the outer line on the secondaries underneath.

Fam. DREPANULIDÆ.

PEROPHORA CORCOVADA.

Apices of primaries not prolonged. Primaries above grey, tinged with reddish at the base, and with brown on the costal margin near the apex; a blackish submarginal line outwardly shaded with reddish brown; a vitreous spot at the end of the cell. Secondaries above with the base grey; a transverse median black line, beyond which the wing is reddish brown, except the extreme outer margin, which is grey; a small vitreous spot as on the primaries. Underneath grey speckled with black; the disk of the primaries reddish,

also a large red space on the outer margin of the primaries. Body brownish grey.

Expanse 44 mm.

Hab. Corcovado, Rio Janeiro.

PEROPHORA ACUTA.

Primaries with the apices very much prolonged. Wings light grey, speckled with black; a black spot in the cell on the primaries; on the costal margin of the same wings, at about three fourths from the base, a faint brown oblique line, which forms a sharp angle and extends to the middle of the inner margin on the secondaries. Body grey, speckled with black.

Expanse 42 mm.

Hab. Petropolis, Brazil.

Fam. COSSIDÆ.

COSSUS PARILIS.

Primaries above black, covered with a network of velvety black lines and striæ, the most conspicuous forming an extra-basal and a marginal transverse line; all these velvety black lines are finely bordered with brownish scales: underneath blackish, the costa and the outer margin greyish, with darker spots and striæ. Secondaries above whitish, with numerous transverse indistinct striæ; the inner margin broadly black: underneath almost the same, but without the dark inner margin. Thorax and abdomen black, with a few brown and grey scales.

Expanse 45 mm.

Hab. Rio Janeiro, Brazil.

COSSUS HORRIFER.

Black, the primaries above with a few velvety black lines, chiefly along the costal margin; a broad basal line, posteriorly bifurcated, and a submarginal irregular line not reaching the inner margin; the outer margin with numerous deep black striæ. The secondaries above brownish black, with a few indistinct darker lines. Underneath, the wings are dark grey, covered with blackish striæ; the disk of the primaries with long black scales. Antennæ more deeply pectinated than in *Cossus parilis*, Schaus.

Expanse 70 mm.

Hab. Rio Janeiro.

COSTRIA ABNOBA.

Primaries above dark silvery grey, the outer margin broadly brown, with darker brown spots; a basal small brownish shade; a large, round, whitish discal spot. Secondaries above brown. Underneath greyish brown, the extreme margins spotted with dark brown; the apices with a small yellowish space. Head and thorax in front dark velvety brown, thorax otherwise silvery grey. Abdomen brownish above, light grey underneath.

Expanse 66 mm.

Hab. Palmeiras, Rio Janeiro.

DOLECTA JUTURNA.

Primaries above grey, with large black spots edged narrowly with luteons, three between the median and submedian veins, one in the cell, another beyond the cell, three near the outer margin and three subapical, also some smaller spots along the costal margin. Secondaries greyish white, blackish at the base; a marginal row of blackish spots and a submarginal dark irregular band.

Expanse 63 mm.

Hab. Rio Janeiro.

DOLECTA MACROCHIR.

Primaries light brown, covered with a network of yellowish-white lines, dividing the ground-colour into a mass of small spots; a few of the spots are dark velvety brown, chiefly on the margin, and the largest spot of all is submarginal, about the middle of the wing. Secondaries paler, and consisting of indistinct brownish spots and striæ; underneath, the markings on the secondaries are more distinct. Body brown.

Expanse 46 mm. ♂.

Hab. Rio Janeiro.

DOLECTA INVENUSTA.

Primaries light grey; a few dark spots on the costal margin; a short dark streak below the median vein at the base; a dark oblique shade beyond the cell; a broad, subapical oblique spot; wavy, longitudinal, dark lines along the outer margin between the veins; the fringe with large black spots. Secondaries dark grey; the fringe paler, with dark spots as on the primaries. Underneath dark grey, consisting of numerous striæ; the fringe spotted as on the upper side.

Expanse 45 mm. ♀.

Hab. Rio Janeiro.

COSSULA NOTODONTOIDES.

Primaries above with almost the entire basal half yellowish white, shading beyond from light brown to very dark violet-brown; along the outer margin are a few paler spots and a few very dark longitudinal streaks. Secondaries above brownish. Head and thorax whitish. Abdomen brownish.

Expanse 50 mm.

Hab. Rio Janeiro.

COSSULA PRÆCLARA.

Primaries above whitish, the costa finely dark brown; a basal, a median, and an outer transverse steel-grey band, the median band being the widest; along the inner margin numerous shorter grey streaks; on the outer margin two large, round, deep red spots. Secondaries brown. Head and thorax grey. Abdomen brown.

Expanse 45 mm.

Hab. Novo Friburgo, Brazil.

LANGSDORFIA POLYBIA.

Light greyish brown, the primaries with a large whitish space occupying the outer portion of the wing; apex and outer margin, however, greyish brown; a quadrate whitish space below the median vein; here and there a few dark striæ. Underneath, the secondaries almost entirely whitish, and on all the wings widely separated dark striæ.

Expanse 40 mm.

Hab. Petropolis, Brazil.

Allied to *Langsdorfia forreri*, Druce.

GIVIRA TECMESSA.

Primaries above violaceous brown, with interrupted transverse rows of small darker spots; the basal half of the inner margin broadly velvety brown. Secondaries whitish, the outer margins broadly blackish. Length of body 14 mm.

Expanse 42 mm.

Hab. Corcovado, Rio Janeiro.

GIVIRA PHILOMELA.

Primaries whitish grey, darker along the inner margin and at the apex, and crossed by numerous short dark lines; a black spot at the end of the cell. Secondaries dark grey. Body light grey, the base of the abdomen somewhat darker. Length of body 13 mm.

Expanse 37 mm.

Hab. Corcovado, Rio Janeiro.

ZEUZERA RAMOSA.

Male. Primaries above with the costal margin dark brown from near the base to the apex; a light brownish space occupying the cell and extending somewhat beyond it; from the middle of the median vein to the centre of the outer margin an irregular black line; the base, inner margin, and outer margin otherwise white with transverse black striæ. Secondaries above white, with a few blackish striæ along the outer margin. Body whitish, speckled with black.

Expanse 41 mm.

Hab. Rio Janeiro.

Closely allied to *Eudoxyla strigillatu*, Felder.

Fam. HEPIALIDÆ.

DALACA PRYTANES.

Primaries greyish brown, with some white streaks along the costa; a short, oblique, dark brown basal streak edged with whitish; a dark brown shade, enclosing some small silvery marks, from the end of the cell to near the inner angle; a submarginal, transverse, brownish band, darker where contiguous to the above mentioned dark shade; the primaries otherwise crossed by indistinct transverse

lines. Secondaries and body brown. Underneath brownish, the costal margins luteous with dark grey spots.

Expanse 33 mm.

Hab. Petropolis, Brazil.

DALACA MUMMIA.

Very light grey, with an outer and a submarginal paler transverse band; the submarginal band is formed of contiguous quadrate spots.

Expanse 40 mm.

Hab. Petropolis, Brazil.

DALACA OREAS.

Primaries dark brown, indistinctly mottled with slightly paler lines; a small dark shade and two minute silver spots beyond the cell; an outer transverse dark line and three silver spots on the outer margin below the apex. Secondaries and abdomen brown. Head and thorax velvety brown. Underneath dull brown.

Expanse 43 mm.

Hab. Petropolis, Brazil.

DALACA TEREA.

Primaries pale fawn-colour with a reddish tinge; a small dark streak at the end of the cell, beyond which is an interrupted transverse dark line; otherwise with numerous short, transverse, pale streaks outwardly bordered with brownish. Secondaries and body very light reddish.

Expanse 42 mm.

Hab. Paso de San Juan, Mexico.

PHASSUS ABSYRTUS.

Male. Light reddish brown, the primaries crossed beyond the middle by four darker bands from the costal margin to the median vein; darker shades and light wavy streaks about the inner angle and along the inner margin. The female has the bands less distinct and crossing the entire wing.

Expanse, ♂ 63 mm., ♀ 85 mm.

Hab. Petropolis, Brazil.

Fam. NOTODONTIDÆ.

CÆLODASYS TONAC.

Female. Primaries light grey; a short oblique black line at the base; some dark greyish lines on the costa, and long grey lines between the veins on the outer margin, a large dark spot at the end of the cell, from beneath which a large oblong dark space extends towards the outer margin just above the inner angle. Secondaries whitish, with the outer margin broadly shaded with dark grey. Underneath whitish, the primaries with the costal margin and apex broadly grey. Body greyish.

Expanse 40 mm.

Hab. Paso de San Juan, Mexico.

CÆLODASYS PEGASIS.

Primaries above with the costa broadly buff, the inner margin violaceous brown, and the intermediate portion brown shaded with buff and violaceous; the base of the wing narrowly buff, limited by a transverse blackish line; at the end of the cell a short transverse brown streak, followed by several longitudinal brown streaks; the basal and outer transverse lines angular and indistinct; a submarginal series of small dark spots, and a marginal row of black points; the fringe alternately brown and buff. Secondaries brown, the fringe yellowish. Underneath brown, the fringe buff. Body brown, the collar edged with black.

Expanse 40 mm.

Hab. Petropolis, Brazil.

ÆDEMASIA TERRENA.

Primaries fawn-colour, shaded with dark brown, darkest along the inner margin; a cluster of black scales below the middle of the median vein; halfway between this spot and the outer margin another similar spot resting on the posterior portion of a very indistinct, outwardly curved, and wavy pale line, which reaches from the costal to the inner margin; the outer margin with the veins dark, finely edged with buff; a series of oblique pale lines between the veins; a large pale space at the base of the primaries. Secondaries dark brownish grey. Centre of thorax and abdomen very dark cinereous. Thorax laterally and head light fawn-colour.

Expanse 50 mm.

Hab. Coatepec, Mexico.

ÆDEMASIA MAXTLA.

Primaries fawn-colour, shaded with brown along the inner and outer margin; longitudinal brown lines on the outer half of the wing and a few pale oblique lines on the outer margin between the veins; at two thirds from the base an indistinct, pale, outwardly curved, transverse line, angular near the inner margin. Secondaries brownish, whitish towards the base. Head and thorax fawn-colour. Abdomen brownish dorsally.

Expanse 38–42 mm.

Hab. Coatepec, Mexico.

This species is very similar to *Ædemasia terrena*, Schaus, but may be distinguished by its paler colour and by the thorax, which has no dark markings.

ÆDEMASIA GUARANA.

Primaries fawn-colour; a large basal space without markings; the median space shaded with brown, beyond which is a transverse, slightly curved, narrow, white band, divided by a blackish line; the outer third of the wing dark cinereous, except a small fawn-coloured space on the outer margin below the apex, a submarginal row of blackish marks, and a marginal row of similar but smaller spots;

the inner angle whitish. Secondaries brownish grey; the fringe luteous. Head and thorax fawn-colour. Abdomen dorsally brown.

Expanse 44 mm.

Hab. Corcovado, Rio Janeiro.

ÆDEMASIA INCA.

Primaries dark brown, slightly paler on the middle of the costal margin and at the inner angle; the median space crossed by several indistinct wavy lines from the costal to the inner margin; a marginal row of velvety brown dashes, inwardly shaded with fawn-colour. Secondaries whitish, with the veins brown and the outer margin broadly shaded with brown; an indistinct transverse row of brownish points on the veins. Body brownish above; underneath paler. The antennæ for half their length are twice as deeply pectinated as in any other species of *Ædemasia* known to me.

Expanse 45 mm.

Hab. Peru.

ÆDEMA MATHEIS.

Dark cinereous brown, except the apical third of the costal margin on the primaries, which is creamy white streaked with light brown; at a third from the base two parallel wavy dark lines from the costal to the inner margin, and beyond the cell two similar lines; a marginal wavy line. Underneath brownish grey; the apices of the primaries yellowish.

Expanse 40 mm.

Hab. Petropolis, Brazil.

ÆDEMA TLOTZIN.

Female. Primaries above light grey, with two median and an outer, nearly straight, transverse black lines; a submarginal black line, concave on its anterior half, angular posteriorly; the wings otherwise crossed by several angular greyish shades. Secondaries above white, with the costal margin and apical half of the outer margin broadly shaded with brown; the inner margin and outer margin towards the anal angle only narrowly shaded with brownish scales. Body brownish grey.

Expanse 40 mm.

Hab. Paso de San Juan, Mexico.

BLERA CAUSIA.

Primaries above with the basal half and a space extending towards the outer margin white with a few black scales; the outer portion of the wing otherwise light brown, here and there shaded with greyish scales, and separated from the white portion by a black line; there are two short, parallel, black streaks beyond the cell, starting from the subcostal vein; a submarginal, very angular black line; the terminal portion of the veins are blackish. Underneath white, broadly shaded with brown and grey towards the apex. Secondaries pure white, with a small brown streak at the anal angle on the

upper surface. Head and thorax light grey. Collar and abdomen brownish grey above. Underneath, abdomen white.

Expanse 48 mm.

Hab. Corcovado, Brazil.

BLERA BIANCA.

Primaries above white, thinly speckled with brownish scales, broadly shaded with light brown at the apex, and there is a cluster of brownish scales at the inner angle; a very indistinct median and outer transverse brown line; two fine dark lines at the end of the cell; from the base of the costa to the inner margin, at one fourth from the base, two parallel black lines; a marginal, nearly straight heavy black line, having outwardly a black dash in the spaces between the veins; a submarginal wavy black line. Underneath white, shaded with black along the costal and outer margins. Secondaries above white, with the veins slightly blackish; underneath white. Head and thorax brownish grey. Abdomen light grey above, white below.

Expanse 45 mm.

Hab. Rio Janeiro, Brazil.

BLERA APELLA.

Primaries above shining greyish brown, variegated with paler scales; an indistinct basal and median black transverse line, between which is a large cluster of white scales, confined between the median and submedian veins; a wavy, outer, transverse black line, within which is a large irregular, triangular, white space, situate on the costa and extending halfway across the wing, and enclosing at the end of the cell a black ring-shaped spot; a distinct submarginal wavy black line. Secondaries above brownish white at the base, dark brown along the outer margin. Underneath, the primaries are brown, shaded with grey; the secondaries yellowish white, with the costal and outer margins brownish. Body brownish grey.

Expanse 43 mm.

Hab. Corcovado, Rio Janeiro.

BLERA SIDA.

Primaries above light brown, darker towards the base, with the basal and outer lines dark brown and very indistinct, the inner margin shaded with grey; a small oblong white spot near the base, below the median vein; a large white space on the posterior portion of the outer margin. Secondaries above light brown, the outer margin narrowly dark brown, the fringe whitish. Underneath, the primaries brownish, the secondaries white. Body grey above, whitish underneath.

Expanse 41 mm.

Hab. Corcovado, Rio Janeiro.

HETEROCAMPA LÆCA.

Male. Primaries above rich brown, mottled with greyish white;

the entire inner margin broadly greyish white; the outer margin also greyish white, with two clusters of brown scales; some grey shades along the costal margin and a large greyish space at the end of the cell; fringe grey, spotted with brown. Secondaries above dull brownish black, with a transverse pale shade from the middle of the costal margin to the anal angle; the outer margin outlined with dull brown; fringe yellowish grey. Underneath, the wings are dull brown, with paler shades chiefly along the outer margins. Head and collar reddish brown; thorax and extremity of abdomen grey; abdomen otherwise brown dorsally, grey underneath.

Expanse 48 mm.

Hab. Tijuca, Rio Janeiro.

HETEROCAMPA HERTHA.

Female. Primaries above light brown, with the base, the costal and inner margins mottled with grey; an indistinct, darker, transverse median line, and an outer triple transverse lunular line, beyond which and up to a submarginal black, wavy line the wing is leaden grey, with a dark streak in each space between the veins, and these streaks are outwardly surmounted by a cluster of brownish scales; the outer margin light brown. Secondaries above brown. Underneath yellowish white, thickly covered with brownish scales. Body grey-brown.

Expanse 50 mm.

Hab. Petropolis, Brazil.

HETEROCAMPA LIMOSA.

Female. Primaries above blackish, mottled with grey along the costal margin and towards the apex; all the transverse lines almost lost in the ground-colour; a submarginal wavy line fairly distinct; a short longitudinal black streak beyond the cell. Secondaries above whitish, the margins clouded with black, and a small black spot at the anal angle. Underneath, the secondaries are about the same; the primaries are dull black, with the costal and outer margins greyish. Body greyish.

Expanse 48 mm.

Hab. Corcovado, Rio Janeiro.

HETEROCAMPA VIRGEA.

Male. Primaries above dark olive-green, with the transverse lines dark brown shaded with lighter brown; at the end of the cell a small brown streak surrounded by a paler shade, and there are some paler spots along the submarginal line near the apex. Secondaries above light grey, with yellowish scales along the inner margin; the outer margin thickly clouded with black scales. Underneath, the wings are dirty white, the costal margin of the primaries being slightly spotted with grey. Head and thorax olive-green. Abdomen brownish, with darker clusters of scales subdorsally. Underneath, body dirty white.

Expanse 45 mm.

Hab. Petropolis, Brazil.

HETEROCAMPA EPONA.

Primaries above dull greyish green, with a large grey space on the costal margin, from the middle of the wing to the marginal transverse line, which is wavy, brownish green; the basal and median lines rather indistinct; the outer line fine, lunular, dark grey; the extremities of all the veins brownish. Secondaries above light grey, with a brown transverse lunular line starting from the costal margin near the apex, but not extending far. Head and thorax dull greenish. Abdomen light brown, with somewhat darker subdorsal tufts.

Expanse 37 mm.

Hab. Peru.

HETEROCAMPA ATRAX.

Male. Primaries above blackish grey, light grey at the base; some submarginal light grey shades; the fringe light grey spotted with black; the transverse lines black, very indistinct, being absorbed by the general ground-colour. Secondaries white, the inner margin with long dark hairs, the outer margin narrowly dark grey; the fringe whitish; the costal margin with some transverse dark grey shades. Head and thorax dark grey. Abdomen dorsally reddish brown at the base and extremity, otherwise dark grey. Underneath, body and primaries light grey. Secondaries white.

Expanse 52 mm.

Hab. Corcovado, Rio Janeiro.

HETEROCAMPA PERILLEUS.

Primaries above light brownish grey; a median wavy black line, preceded by a large blackish space, on the costal margin; the median space is crossed by an angular, dark grey line, and there are two small pale shades in the cell; the outer line is black, irregular, and followed by some broad dark brown shades; there is a marginal white shade, with inwardly a series of irregular black spots; a submarginal fine, lunular line; the fringe light grey, spotted with brownish grey; underneath blackish. Secondaries white, with the outer margin broadly dark grey; the extreme margin whitish, with the end of the veins dark grey and the fringe white; just above the anal angle a dark streak. Head and collar dark brown. Thorax grey. Abdomen grey, darker dorsally, and with a black transverse line on the anal segment.

Expanse 46 mm.

Hab. Novo Friburgo.

SYMMERISTA DENTATA.

Primaries cinereous brown, the costal margin very broadly darker, the basal half being violaceous brown, the apical half paler brown; this space is limited by an irregular velvety brown line, which starts a short distance from the base, follows through the cell, at the end of which it has a posteriorly prolonged tooth, and continues to the outer margin. Secondaries cinereous brown. Palpi dark brown.

Head light grey. Thorax greyish, with the anterior portion velvety brown. Abdomen brownish.

Expanse 44 mm.

Hab. Rio Janeiro.

SYMMERISTA TETHYS.

Primaries dark cinereous with transverse brownish shades; two inner and an outer blackish line; a marginal row of black spots, inwardly edged with yellow; a yellowish spot circled with black at the end of the cell; a whitish crescent-shaped spot on the costa near the apex; the fringe with a yellow spot at the end of each vein. Secondaries brown, very dark on the outer half; the fringe and base yellowish. Underneath, the secondaries are yellow, with the costal margin narrowly, and the outer margin broadly, brown; the fringe, however, yellow. Body brown above, yellow underneath.

Expanse 45 mm.

Hab. Corcovado, Rio Janeiro.

SYMMERISTA PROCNE.

Primaries above light grey, irrorated with darker grey and reddish scales; a large space at the inner angle white; a marginal interrupted black line; a submarginal reddish transverse shade; the apex reddish brown; the fringe on the apical half of the outer margin reddish with black spots, containing each a white dot; the fringe near the inner angle white. Secondaries above brown; fringe whitish. Underneath brown; the outer margins luteous, the primaries having also a black band on the extreme margin; fringe on the primaries reddish, on the secondaries white. Head and anterior portion of thorax, also anal segment, reddish brown; body otherwise cinereous, with an indistinct greyish subdorsal line on the abdomen.

Expanse 63 mm.

Hab. Corcovado, Rio Janeiro.

SYMMERISTA MYCONOS.

Primaries above light grey; three basal irregular dark lines; in the cell a V-shaped black line; two outer, parallel, lunular lines, followed by a series of blackish spots, largest towards the costal margin; a submarginal, angular black line, preceded at the apex by a heavy blackish shade. Secondaries with the basal half whitish, the outer half dark grey, and the fringe white. Primaries underneath dull grey, with a little white towards the base and on the outer margin between the veins. Body light grey. Collar edged with black.

Expanse 34 mm.

Hab. Petropolis, Brazil.

HARPYIA (?) TENUIS.

Primaries above dull silvery white, thinly speckled with blackish

scales; a transverse, fine, black median line, preceded on the costa by a cluster of blackish scales; the costa beyond this with some small brownish spots; the outer line very fine, indistinct, followed by a broken series of large pale brown spots, not reaching the inner angle, and each outwardly enclosing a small cluster of blackish scales; the submarginal line fine, but distinct, wavy, black. Secondaries white, with a narrow brown outer margin, and the ends of the veins shaded with brownish. Underneath, the wings are whitish, the primaries with the veins and costa brownish. Head and collar light brown; thorax and extremity of abdomen grey; abdomen otherwise dorsally light brown, below white.

Expanse 36 mm.

Hab. Petropolis, Brazil.

ROSEMA EXCAVATA.

Primaries above green, a slight excavation on the outer margin just below the apex, in this excavation the fringe is white, otherwise it is brown; the costal margin is very narrowly edged with yellowish brown, and there is an indistinct whitish discal point. The secondaries above are yellowish brown in the male, yellow in the female. Underneath the wings are yellowish brown in the male, yellow in the female, with a brownish shade on the excavation of the primaries, and a row of marginal black points on the secondaries. Head and thorax green. Abdomen yellow, darker in the male.

Expanse 36 mm.

Hab. Petropolis, Brazil.

ROSEMA LUNA.

Male. Primaries above green, with the costal margin narrowly edged with white, and a small white spot in the cell; underneath whitish, with the fringe green and the costal margin reddish. Secondaries whitish. Head and thorax green. Abdomen roseate above, white underneath.

Expanse 30 mm.

The female differs in having the costal margin underneath white, and the abdomen is dorsally white, merely shaded with red towards its base.

Expanse 34 mm.

Hab. Peru, Brazil, Novo Friburgo.

ROSEMA LAPPA.

Male. Primaries with the costal margin straight for two-thirds, and then slightly convex to the apex. Above green, the costal margin very narrowly edged with yellowish; the inner margin with an irregular brown mark from the base to the inner angle, which is itself prolonged in a slight tooth; in the cell a black point. Secondaries above whitish, with the inner margin roseate. Underneath, all the wings are whitish. Head green. Collar and thorax greyish

brown, the latter green laterally. Abdomen red above, white laterally, brown underneath.

Expanse 41 mm.

Hab. Peru.

ROSEMA INCITA.

Male. The costal margin as in *Rosema lappa*, Schaus. Primaries above green; a small black point in the cell, and a long black mark on the middle of the inner margin. Underneath whitish, with the costal margin slightly roseate. Secondaries clear white. Head green. Collar brown. Thorax brown, green laterally. Abdomen above with the base brownish, otherwise reddish; underneath white.

Expanse 32 mm.

Hab. Peru.

ROSEMA LANGUIDA.

Male. Primaries with the costal margin straight; above green, the costal margin narrowly bordered with yellowish; a small black point in the cell; the inner margin with the fringe along the basal half greyish, and a small grey spot about the middle of the margin, containing a cluster of green scales. Secondaries above pale roseate. Underneath the wings are whitish, with the costal margin of the primaries reddish. Head green. Collar grey. Thorax greyish, laterally green. Abdomen roseate dorsally.

Expanse 37 mm.

Hab. Corcovado, Rio Janeiro.

ROSEMA UNDA.

Primaries above green, with the costal margin very narrowly yellowish; in the cell a black spot circled with yellowish; near the base of the inner margin a small cluster of brownish scales. Secondaries above yellowish roseate. Underneath yellowish white, with both costal margins distinctly reddish. Head green. Collar brownish. Thorax brown, laterally green. Abdomen red above, yellowish underneath.

Expanse 34 mm.

Hab. Peru; Brazil, Novo Friburgo.

RIFARGIA CLOELIA.

Primaries above cinereous, faintly mottled with greenish and roseate; at the base of the inner margin a streak of black scales, also a few at the base of the median vein; at the end of the cell a large crescent-shaped black line, from the interior of which to the apex the ground-colour is much lighter; there is a marginal row of velvety-brown streaks and three similar subapical streaks. Secondaries smoky grey, somewhat paler at the base. Underneath the wings are greyish, the secondaries paler than the primaries. Body greyish brown.

Expanse 37 mm.

Hab. Rio Janeiro.

RIFARGIA GELDUBA.

Female. Primaries above dull cinereous, with a few greenish scales along the inner and outer margins; a few black scales forming a streak at the base of the inner margin, and some similar scales at the base below the median vein; a curved brownish shade from the middle of the subcostal vein to the middle of the outer margin, enclosing a pale space; a pale space along the subcostal vein near the apex; four subapical brown streaks between these two pale spaces; a submarginal wavy brown line. Secondaries above dark grey, paler at the base. Underneath all the wings greyish. Body brownish.

Expanse 38 mm.

Hab. Jalapa, Mexico.

ETOBESA TIZOC.

Primaries above violaceous grey, darker at the base; on the outer half of the wing, longitudinal streaks of dark velvety brown, light brown, and creamy white, the latter streaks occurring only near the middle of the outer margin; the base of the submedian vein whitish. Secondaries above white, with the anal angle dark brown; the fringe spotted with brown. Body greyish brown; the posterior portion of the thorax darker.

Expanse 35 mm.

Hab. Peru.

PHYA PSAMATHE.

Male. Primaries light brown, a dark space at the base of the costa; a black spot in the cell, from which extends a broad brown shade to the outer margin, and beneath this on the outer margin a large brown space; the fringe spotted with dark brown. Secondaries whitish hyaline; a few brownish scales at the anal angle and along the inner margin. Body brown.

Expanse 38 mm.

Hab. Corcovado, Rio Janeiro.

HAPIGIA XOLOTL.

Primaries with the basal half of the inner margin slightly excavated; apex acute; outer margin very convex. Above dull brownish grey; the basal transverse line wavy, very indistinct; the outer line straight for two-thirds from the costa, then slightly curving towards the inner angle, brown, inwardly shaded with buff; a submarginal angular black line, shaded with silver scales, close to the apex; at the end of the cell a large irregular and a small round golden spot, the larger one having its centre reddish bronze. Secondaries above brownish grey, yellowish white towards the base. Underneath dull grey. Body grey.

Expanse 60 mm.

Hab. Paso de San Juan, Mexico.

HAPIGIA ACCIPITER.

Primaries with the costa straight; the apex acute; the outer margin straight just below the apex, then oblique to the inner angle, which is prolonged in a long, broad tooth. Above brown, shaded with olivaceous at the base; on the inner margin some pale reddish-brown marks; a median, transverse, wavy, blackish-brown line, further from the base on the inner margin than on the costal margin; in the cell a conspicuous black point, beyond which two indistinct, irregular, paler spots, faintly outlined with black; the outer line straight, dark, inwardly shaded with lighter brown; the submarginal line very irregular, black, preceded by a broad wavy shade, especially noticeable towards the apex. Secondaries above blackish brown, dull white along the costal margin; a yellow spot on the fringe at the end of each vein. Underneath all the wings yellowish, with long blackish scales on the primaries below the subcostal vein. Body dark olivaceous brown above, reddish brown underneath.

Expanse 70 mm.

Hab. Rio Janeiro.

HAPIGIA PHOCUS.

Shape of wings and markings very similar to *Hapigia apulus*, Cramer. Primaries above much darker than in *H. apulus*, being of a rich velvety brown, with the inner and outer margins paler; the outer transverse line is not so wavy as in *H. apulus*, and the two silver spots in the cell are closer together. Secondaries above white; the inner margin and fringe greyish brown; the veins brownish. In *H. apulus* the apex of the secondaries is broadly shaded with brown. Underneath the wings are whitish, with the costa and apex of the primaries powdered with brown. Head and thorax brown. Abdomen above black. Underneath brown. Anal hairs testaceous.

Expanse 70 mm.

Hab. Rio Janeiro, Brazil.

RHUDA ENDYMION.

Primaries above with the anterior portion of the wing shading from light brown at the base to pale buff towards the outer margin, and with a few longitudinal dark streaks; a heavy velvety-brown line, extending from the base of the costa to the middle of the outer margin, separates the brownish portion of the wing from the posterior portion which is light grey; on this grey space a trace of the outer line is visible; the costal margin towards the apex is also greyish; on the extreme outer margin a row of V-shaped brown marks. Secondaries white; the inner margin broadly covered with long brown scales, and the outer margin spotted with brown. Underneath the wings are whitish, with the costal margin of the primaries broadly smoky brown. Head brown. Collar velvety brown. Thorax grey. Abdomen above brownish grey, below whitish.

Expanse 58 mm.

Hab. Rio Janeiro.

ICHTHYOSOMA CASSIOPE.

Primaries very pale fawn-colour, crossed by four narrow, double, zigzag lines of a darker shade—one at the base, one through the end of the cell, the third beyond the cell, and the fourth marginal, the latter shaded inwardly with smoky brown; on the middle of the inner margin a reddish-brown spot. Secondaries white, the inner margin covered with long reddish-brown scales. Underneath white, slightly reddish on the costal margins. Thorax and abdomen above pale reddish brown; underneath white.

Expanse 49 mm.

Hab. Rio Janeiro.

MARTHULA NORA.

Primaries above brown, broadly lilacine on the inner margin, and some reddish-brown shades along the costal margin and about the middle of the outer margin; the basal, median, outer, and sub-marginal lines pale, the first three absorbed by the ground-colour on the costal margin, where crossing the reddish-brown shades. Underneath brownish, with a broad whitish marginal shade. Secondaries above white, with the veins and outer margin shaded with brown. Underneath white. Head reddish brown. Collar and abdomen brown. Thorax lilacine.

Expanse 34 mm.

Hab. Corcovado, Rio Janeiro.

MARTHULA PLEIONE.

Primaries above brown, the inner margin broadly grey; the basal, median, and outer lines only visible on the inner margin; the sub-marginal line distinct throughout; a marginal row of black points; on the costa near the base a small yellowish-white patch, and a much larger one about the middle of the costa, these are both crossed by irregular reddish-brown lines. Underneath brown. Secondaries above brown, slightly hyaline towards the base. Underneath yellowish white. Body greyish brown.

Expanse 36 mm.

Hab. Corcovado, Rio Janeiro.

4. On some Specimens of Frogs in the Indian Museum, Calcutta, with Descriptions of several new Species. By W. L. SCLATER, M.A., F.Z.S.

[Received May 2, 1892.]

(Plate XXIV.)

Before leaving Calcutta at the end of last year I had been engaged in examining the collection of Batrachians contained in the Indian Museum.

The collection comprises examples of 180 species, of which 103